Application No. 10/563,322

Reply to Office Action of September 9, 2009

REMARKS/ARGUMENTS

Claims 1-4 and 6-22 are active.

Claims 1 and 17 are amended as suggested in the action at page 2.

Claim 1 is also amended to remove the complexity value F (now presented in dependent claim 21) and in accordance with the disclosure at page, line 32 to page 3, line 1 and page 6, line 31 to page 7, line 6.

Claim 15 is amended for clarity.

Claim 22 finds support on page 7, line 29 to page 8, line 1.

No new matter is added.

Applicants thank the Examiner for the courtesy of discussing this case with their undersigned representative on October 8, 2009. During this meeting, it was explained that the "complexity value F" is clear (discussing the rejection under 35 USC 112, second paragraph) because it is described on pages 6-7 of the application referencing FIG. 2. It was also emphasized that the shape of this substrate takes into account two values of deviation and/or deflection: on one hand: in a fore-and-aft (longitudinal) direction and on the other hand: in a transverse direction. The Examiner asked for further clarification.

In the context of the formula presented on page 7 of the application,

- Y is a longitudinal plane section
- COY is the length of the chord joining the ends of the curve obtained by such section
- H0Y is the maximal height between the glazing and the chord
- Youis the plane which gives a maximal value for HOY
- Z is a transversal plane section

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• C0Z is the length of the chord joining the ends of the curve obtained by such section

• H0Z is the maximal height between the glazing and the chord

• Z0 is the plane which gives a maximal value for H0Z

Therefore, the complexity value F is representative of the glazing deformation in both longitudinal and transversal directions. The complexity value is equal to 0 if the glazing is curved in only one direction.

With respect to claim 15, it is noted that Claim 15 depends from Claim 1. Claim 1 defines that the device includes a stack of electrically controllable functional layers (see Claim 1). Claim 15 further adds an additional electrochromic functional layer to the ones already present in Claim 1. Therefore, nothing is deemed to be indefinite by this claim.

In view of this discussion, withdrawal of the rejection asserted under 35 USC 112, second paragraph is requested.

The discussion of October 9th also addressed the rejection combining US 4,773,741 (Inaba) and US 5,981,076 (Ojeda) (as well as the second rejection adding <u>Agrawal</u>).

It was explained that reliance on Ojeda to include PET or PMMA into the Inaba device is not proper in light of the fact that both films are comparative films (i.e., not useable for the purpose Ojeda intends) to the sPS film that is the subject of the Ojeda invention.

Therefore, Ojeda does not teach using a polymer film composed of PET having the percent shrinkage but rather that the sPS film has that percent shrinkage because the conventional PET film was not suitable.

It was further explained that the complexity value F (now presented in dependent claim 21), which is not at all taught in the citations.

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The <u>Inaba</u> patent describes an electrochromic display device which includes glass substrates (features 10 and 20 in Figure 1), electrode films and electrochromic layer (feature 14 in Figure 1). <u>Inaba</u> also suggest providing an insulating film, for example, features 34 and 36 in Figure 3, which surrounds the electrode body 32, and that can be composed of polyethylene. (See columns 5 and 6 of the <u>Inaba</u> patent).

The Examiner acknowledges o that Inaba does not specifically disclose a film having the percent shrinkage as defined in Claim 1. It is for this feature the Examiner relies on the Ojeda patent which teaches overlay films being syndiotactic polystyrene having reduced shrinkage (see Example 4 in columns 9-10). The Ojeda patent mentions PET as a film but does so for comparative purposes, i.e., not suitable to provide good dimensional stability. Therefore, contrary to the Examiner's conclusion on page 5, Ojeda does not teach using a polymer film composed of PET having the percent shrinkage because according to Ojeda the conventional PET film was not suitable. Indeed, Ojeda teaches away from using such PET films.

Further,

. . . an invention is not obvious to try where vague prior art does not guide an inventor toward a particular solution. A finding of obviousness would not obtain where "what was 'obvious to try' was to explore a new technology or general approach that seemed to be a promising field of experimentation, where the prior art gave only general guidance as to the particular form of the claimed invention or how to achieve it." This expresses the same idea as the KSR requirement that the identified solutions be "predictable."

Bayer Schering Pharma AG v. Barr Laboratories, Inc. 2009 U.S. App. LEXIS 17372, 91 U.S.P.Q.2D (BNA) 1569 (Fed. Cir. 2009) (internal citations omitted)

Claim 1 defines deflection in the substrate in longitudinal and transverse directions, the specification at page 2 line 27 to page 3 line 1 explains that doubly curved substrates

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(reflected in the claims by deflection in the two dimensions) lead to more mechanical stresses resulting from lamination, which deteriorates layers incorporated with the lamination interlayer such as solar protection layers or electrochromic layers, which would lead to deterioration of the function of the electrically controllable device. None of the cited prior art provides any teachings to a doubly curved substrate nor what films to select for faciliting protection of such substrates. Rather, the polymer films having the claimed shrinkage during lamination have been found by the inventors to protect the functional layers during lamination of doubly curved substrates (page 3 lines 16 and 17).

That the cited references teaches very different articles (compared to what is claimed), with only general disclosure as to what could be included, there is simply nothing in citations of the rejections that suggests to the problem underlying the present invention, protection of functional layers in doubly curved substrates. The disclosures that are relied upon in the rejection are only "general guidance" (*Id.*) and simply are not the "finite disclosure" and guidance to "a particular solution" that the law requires. (*Id.*).

With respect to Claim 21 and the complexity value F, in the Official Action on page 7, first paragraph, the Examiner concedes that neither Ojeda nor Inaba describe this value but simply states that it would have been obvious without specifically addressing the complexity value in F provided in the claim. Under US law claims are given their broadest reasonable interpretation, however, it is an error to disregard an express limitation in the claims (*In re Bond*, 710 F.2d 831, 833 (Fed. Cir. 1990). The specification on pages 6-7 clearly define this value and the Applicants have provided further explanation for what this value means.

Again, as depicted in figure 2 of the specification in light of the specification at the top of the page 7 of the specification, it is apparent that the parameter F can be calculated for a complex windshield. The shape of this substrate takes into account two values of deviation and/or deflection: on one hand: in a fore-and-aft (longitudinal) direction and on the other

hand: in a transverse direction. The range of the value F which is given in the claim 21 is specific to this kind of substrate and to due these values, the percentage shrinkage of the interlayer is between 0.6 and 2.0% in this kind of design of substrate, which incorporates an electrochromic system.

Agrawal is cited to allege that certain features of Claims 12-14 would have been obvious when the teachings of Agrawal are combined with Inaba and Ojeda. Claims 12-14 depend from Claim 1 and therefore incorporate all of the limitations of Claim 1. Agrawal does not remedy the deficiencies of the primary combination of Inaba and Ojeda in that Agrawal does not teach a complexity F value or the polymer film percentage shrinkage as defined in the claims. Agrawal also does not describe the limitations of Claims 19 and 20. As the combination of Inaba and Ojeda do not teach these limitations when combined with Agrawal, the combination of art cannot and does not teach all of the limitations of the claims.

Withdrawal of both rejections applied under 35 USC 103(a) is requested.

A Notice of Allowance for all pending claims is requested.

Respectfully submitted,

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